

Effects of using onion and garlic as house rat pesticides



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Determination Of The Variation In Concentration or Amount Of Compounds

Between Varieties of Onion of Professor> Onion has been one of the most important crops being cultivated from India and as well as exported. Onion has a variety of purpose and can be used in cooling, pickling, and in ancient history they use it for medicinal purposes. Its flavor strength is base on sensory attributes such as pungency and lachrymatory factor. It is said that its nutritive value, its pungency and the lachrymatory factor are often associated with the onion bulbs which varies depending on the genotypes. White onion, which is one of the variety, is suitable for dehydration purposes while the others consisting of high contents of non-reducing sugars and low proteins are only good for storage purposes. The lachrymatory factor together with its color also contributes to its flavor.

On the contrary, Onions do not provide only flavor but it promotes health through the nutrients that we can get from it - the phytochemical. Aside from that, it contains acrid which stimulates our tear glands and our mucous membranes causing us to produce tears or makes us cry. Other compounds that we can get from onions are sulfur and quercetin. These two compounds are considered as an anti-oxidants. Recent studies shown that these two compounds help to neutralize all free radicals in our body and protect our cell membranes from any damage. There are some studies conducted in Japan wherein they used onion as feeds for some rats. Rats shown delay in aging process. So it is therefore considered that onion is an effective anti-oxidant for our cells.

The compound quercetin helps to eliminate free radicals in our body, it also helps to protect and regenerate our damaged cell membranes. Apart from onions, apples and tea are good source of quercetin. This compound is said <https://assignbuster.com/effects-of-using-onion-and-garlic-as-house-rat-pesticides/>

to have anti-oxidants that is twice of what we can get from tea and even in apples but we can get little contents from white onions compare with yellow and red onions.

As previously discussed, the pungent smell of onion is due to thiollyl or alliins compounds. Do you know what chemical present in the onion that makes us to cry It is indeed the compound alliins causing us to cry or produce tears. Every time we cut an onion, this alliins compound undergo an enzymatic reaction and is broken down into a sulfide compound. Sulfide compounds are aromatic in nature causing or stimulating our tear ducts. This compound also is the one giving a very distinctive smell for the onion.

Beneficial Effects to Health

Aside from the phytochemical that onion is providing. There are lots of nutrients that we can benefit from. Onions in nature are good source of ascorbic acid, potassium, fibers, folic, calcium, iron and protein. It also contains low amount of sodium, calories and is cholesterol free. The phytochemicals being released by onion such as disulfides, trisulfides, cepaene and vinyl dithiins, are good enough to fight for cancer cells and microbes.

Different Studies

With the impressive contents and medicinal properties of onions. Different studies have been made from different Universities across the globe. One study mentioned that onion consumption can help to reduced risk of some diseases such as gastric ulcers since it fights for the free radicals.

Another study conducted at the University of Wisconsin - Madison have said that the more the onion is pungent the more it exhibits strong anti-platelet activity. The danger about platelet aggregation is that it causes thickening of <https://assignbuster.com/effects-of-using-onion-and-garlic-as-house-rat-pesticides/>

the arteries and even veins causing either stroke or cardiovascular diseases. Through the study conducted, onion has an inhibitory capacity for platelet aggregation and has the potency of making the blood thinner.

Recently, the University of Bern in Switzerland conducted a test regarding onion consumption wherein it was proven that a gram consumption per day of onion for 4 consecutive weeks has increased bone mineral content in rats of approximately 17% and 13% for having mineral density in comparison with those other animals whom tested through controlled diet. Therefore, it was concluded that apart from the anti-oxidant effect of onion, women and men can now both enjoy having good and health bones freeing them from osteoporosis. In conjunction to the effect of the chemical compound quercetin, it was suggested that it helps also to decrease the incidence of cataract formation, development of cancer cells in the breast, colon, ovary, lungs and bladder.

Now I suggest that despite the smell, make it a habit to eat plenty of onions and think about the wonderful benefits we can get from this small crop.

References

Wilson, E., Dr. Christopher's Herbal Legacy: Onion., Retrieved from [http://www. herballegacy. com/Wilson_Chemical. html](http://www.herballegacy.com/Wilson_Chemical.html)